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Examiner Name	To Be Assigned
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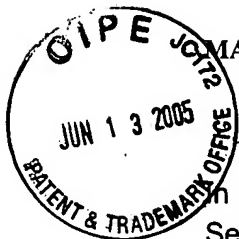
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MAT-8575US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Shinichiro Takabayashi, et al.

Serial No.: 10/502,512

Group No.: 2631

Filed: July 23, 2004

Examiner: To Be Assigned

For: DISTORTION COMPENSATOR

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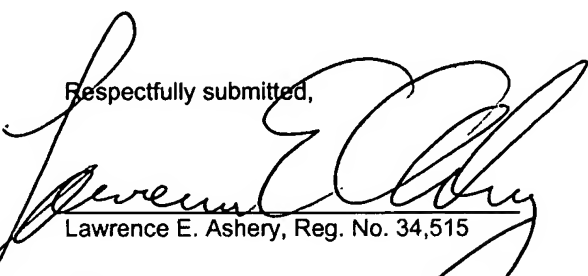
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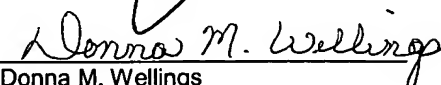
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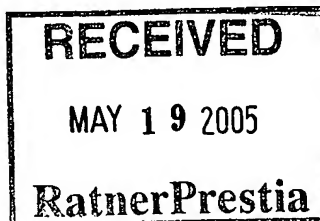


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Power of Attorney: The patent practitioners associated with Customer Number 23122.

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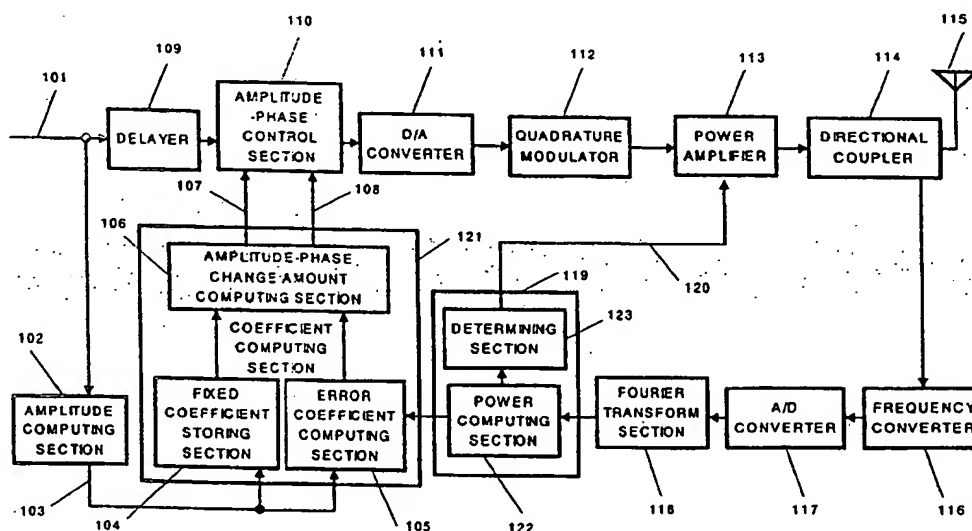
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(54) Title: **DISTORTION COMPENSATOR**



(57) Abstract: A coefficient computing section (121), for computing a characteristic reverse to an input/output characteristic of the power amplifier (113), is configured by a fixed coefficient storing section (104) and an error coefficient computing section (105). The fixed coefficient storing section (104) is previously stored with the characteristic reverse to a pre-measured input/output characteristic. The error coefficient computing section (105) computes an error coefficient between a characteristic stored in the fixed coefficient storing section (104) and a current characteristic of the power amplifier (113). When the determining section (123) determines that the adjacent-channel leak current power ratio is greater than a predetermined value, an operation halt is instructed to the power amplifier (113). With this structure, rapid convergence is possible in adapting operation for follow-up the characteristic variation of the power amplifier (113). Furthermore, interference to the adjacent channel due to distortion abnormality in the power amplifier (113) can be prevented.

WO 03/105336 A1



— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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